

Total No. of Questions : 4]

SEAT No. :

PE584

[Total No. of Pages : 1

[6578]-57

**S.E. (Robotics and Automation) (Insem)
MANUFACTURING TECHNOLOGY
(2019 Pattern) (Semester - III) (211502)**

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Answer Q.1 or Q.2 and Q.3 or Q.4.*
- 2) *Figures to the right indicate full marks.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Assume suitable data, if necessary.*

Q1) a) Describe allowances to be considered while designing a pattern in sand casting with neat sketch. [8]

b) Describe the procedure to determine permeability of a sand with neat sketch. [7]

OR

Q2) a) Describe types of patterns (any three) with neat sketch. [8]

b) Describe the procedure to determine Grain Fineness Number of a sand with neat sketch. [7]

Q3) a) Describe and compare between Open die forging and Closed die forming with neat sketch. [5]

b) Describe upsetting with neat sketch. [5]

c) Describe Four high rolling mill with neat sketch. [5]

OR

Q4) a) Describe and compare between Hot forging and Cold forging. [5]

b) Describe double acting steam hammer with neat sketch. [5]

c) Describe Three high rolling mill with neat sketch. [5]

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